

Name of Contractor 

25X1

## MONTHLY CONTRACT STATUS REPORT NO.

For Period 1 October 1971 to 31 October 1971 Date: 3 November 1971Contract No.  Task No. \_\_\_\_\_ Project No. \_\_\_\_\_Period of Contract 26 April 1971 to 30 May 1972

Amount of Contract :

Amount of Obligations  
and/or Expenditures This Period:Amount of Obligations  
and/or Expenditures to Date :

Estimate of Funds to Complete :

Percentage of Funds Expended to date 48%Percentage of Work Completed to date 48%

(Note: All amounts shown must include overhead, G&amp;A, handling charges, fees, etc.)

1. Is work on schedule? Yes (Attach sheets if necessary)
2. Can the Contract be completed in the authorized time? Yes
3. Can the Contract be completed with the authorized funds? Yes

Comments: (Attach sheets if necessary)

SEE ATTACHMENT #1

Technical Progress in Period: (Attach sheets if necessary)

SEE ATTACHMENT #1

Objective for the Next Period: (Attach sheets if necessary)

SEE ATTACHMENT #1

Submitted by

## MONTHLY TECHNICAL PROGRESS REPORT #5 - ATTACHMENT #1

The Preliminary Design Review was held on 22 and 23 September 1971 at the contractor's facility. The Preliminary Design Review Briefing Package presented at that time is included in this report as attachment #2.

A mock-up of the HILS utilizing the tungsten-halide lamp was demonstrated in the GFE MLT-1540. It was an optically complete HILS, with motor-driven iris dimming control, placed in proper relationship to the background lamps beneath one of the viewing surfaces, allowing direct comparison between the HILS and the standard viewing surface on the other side of the MLT. This mock-up did not include the motion or tracking systems.

The design approach utilizing the ELH lamp, as presented and recommended in the Briefing Package, was accepted by the customer with two points being raised: the possibility of reducing the shadowing of the background illumination by the HILS assembly with a slightly smaller configuration utilized in the final design; the proposed maximum HILS motion speed of 1"/sec. to be raised to 5"/sec. as a design goal.

A demonstration for obtaining higher light levels was presented; techniques included removing the color correcting filter, changing the spot size, and changing the diffuser (see attachment #2 for details). Light levels in excess of 200,000 foot lamberts were shown.

Technical Progress for the Period Included:

- . Completion of Study Phase of program
- . Completion of the HILS mock-up assembly
- . Completion of temperature and cooling tests
- . Basic design for the final HILS assembly completed and optical components defined

- . Completion by contractor and acceptance by customer of PDR (as summarized in attachment #2)

Objectives for the Next Period

- . Initiate detailed design of light tray
- . Initiate detailed design of motion system
- . Establish specification for all optical components
- . Procure background lamps